What is an Engineer?

An engineer is someone who creates and designs how things are made – like a train. Soon we will have our very own passenger train system in Honolulu! Here you will learn what different engineers do to make the train work:

Environmental engineers help to keep the air, water and land clean.

Geological engineers make sure the ground is strong enough to build on.

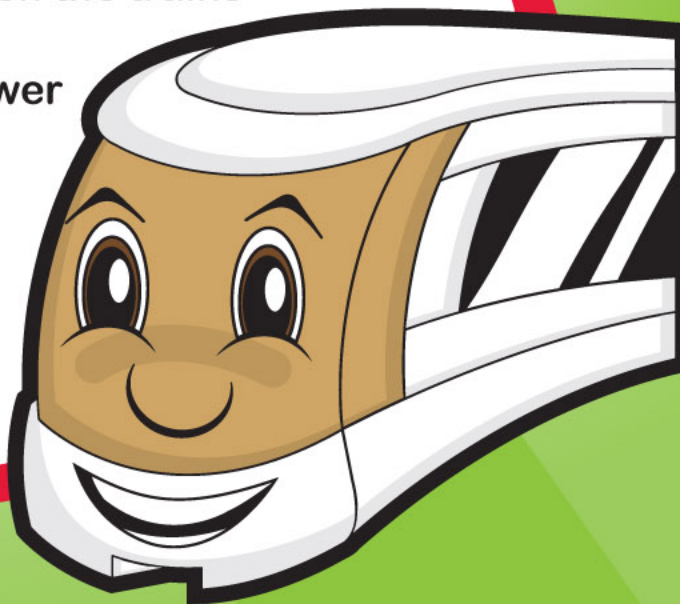
Civil engineers design tracks and stations that are strong and safe.

Mechanical engineers design the engines and moving parts.

System engineers decide when the trains move.

Electrical engineers give power to the trains and the lights.

Structural engineers make sure overhead tracks are well supported.

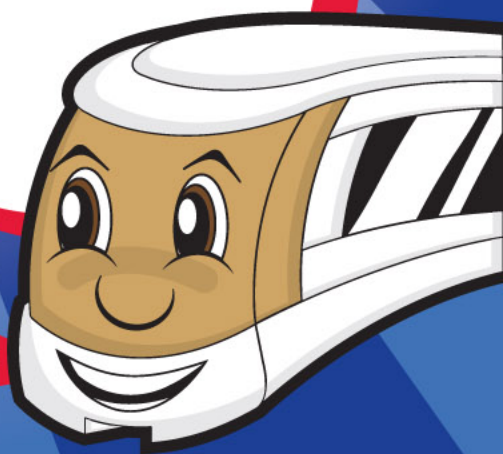


What is a train?

VEHICLE

- A train has an engine, wheels, and a cabin for people.
- It has smart doors that stay open when people are getting in or out of the train.

Mechanical engineers work on this!



Where do trains sleep?

MAINTENANCE YARD

Trains need care, just like people. When they are not busy working, trains go to the yard house. There they will rest, see the doctor (mechanics) for a check-up, and take a bath (wash bay).

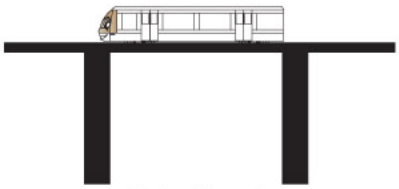
Systems and environmental engineers work on this!

How high is the train track?

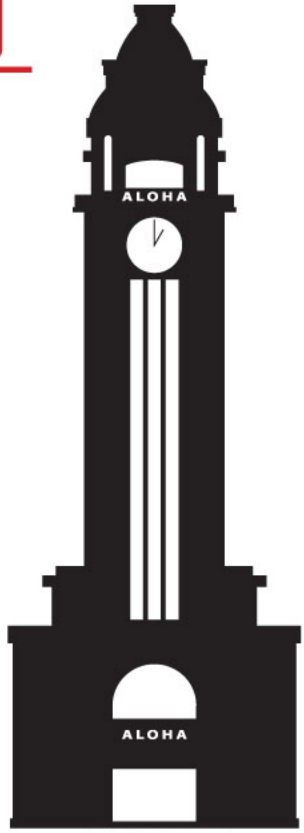
HEIGHT

The train track will be about 30 feet above the ground.

18 feet



30 feet



184 feet

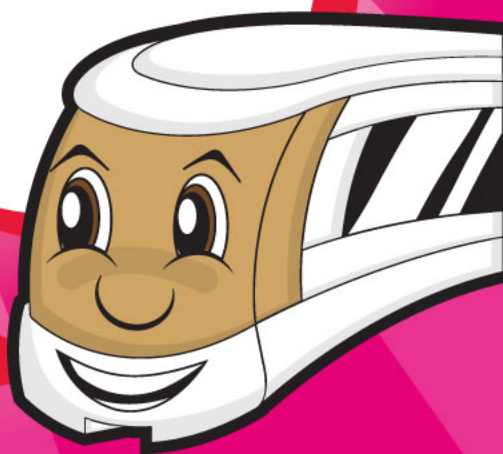
Civil, structural and geological engineers work on this!

What makes the train move?

POWER

- Electricity that comes from power houses will make the train move.
- If one power house gets sick, the next ones can make enough power to keep the train going.

Electrical engineers work on this!



Where can I go?

STATIONS

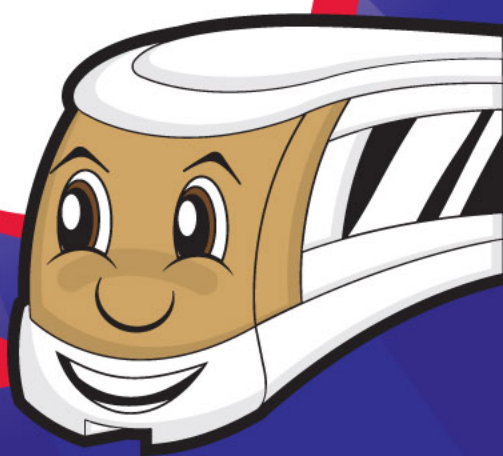
- Stations are places along the tracks where you can get on and off the train. You can take the train to school, to go shopping, to visit friends, and more!
- The stations will be level with the track. Each station will have escalators, elevators and stairs to take you to the train.

All engineers work on this!

Who are the Train's friends?

The Transportation Family

- TheBus brings people to the train. It is the Train's sister and works hand in hand with the Train.
- TheBoat is the Train's cousin and also helps to move people to and from places.
- The train, TheBus, and TheBoat all work together as a transportation family.



Aloha and welcome to our exhibit, "Engineering Our Future" which is intended to encourage our young people to consider the profession of engineering.

Engineering has been essential in building the physical infrastructure of our nation and our state: the homes we live in, the buildings where we work and learn, the roads we travel on and now Honolulu's rail transit system.

"Engineering Our Future" is also a wonderful reminder that our rail transit system really is for our keiki. I am delighted that we can all share in what our island's children envision for their future.

Mahalo to all of the children who have participated in our exhibit – you inspire all of us to work together to bring progress to our home, the island of O`ahu.

Warm regards and aloha.

Yours truly,

Mufi Hannemann
Mayor